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Louis R. Degenaro

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EXAMINER

SYED, FARHAN M

ART UNIT

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/665,564	<b>Applicant(s)</b> DEGENARO ET AL.	
	<b>Examiner</b> FARHAN M. SYED	<b>Art Unit</b> 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 31 August 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. Claims 1-37, filed 31 August 2010, are pending. The Examiner acknowledges amended claims 1, 2, 9, 14, 27, and 35.

### ***Examiner's Note***

2. Examiner has cited particular paragraphs in the references as applied to the claims below for the convenience of the applicant. Although the specified citations are representative of the teachings of the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. It is respectfully requested from the applicant in preparing responses, to fully consider the references in entirety as potentially teaching all or part of the claimed invention, as well as the context of the passage as taught by the prior art or disclosed by the Examiner.

### ***Response to Arguments***

3. Applicant's arguments filed 31 August 2010 have been fully considered but they are not persuasive. The applicant argues:

(1) The cited art fails to teach or suggest 'constructing at least one virtual resource independent of an actual resource'

The Examiner disagrees. The cited art teaches constructing (i.e. constructs. Furthermore, the Examiner finds support for construction in the provisional application, see page 6, which defines a constructor as a set of programming logic associated with the creation of an instance.)(paragraph [0248]) at least one virtual resource independent ( a virtual model implementation. In addition, the Examiner finds support for a virtual model implementation as a model

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controller on page 24 of the provisional application.)(paragraph [0248]) of an actual resource (i.e. real implementation. The Examiner finds support for actual resource in the view controller of the provisional application, see page 25.)(paragraph [0248; 0550])

(2) The cited art fails to teach or suggest 'connecting the actual resource to the at least one virtual resource'

The Examiner disagrees. The cited art teaches connecting the actual resource to the at least one virtual resource (i.e. virtual resources are stored in a database. The Examiner finds support in the Provisional Application, see page 23, second paragraph, 'interaction between components...')(paragraphs [0248, 0437]).

(3) The cited art fails to teach extracting at least one descriptor from said at least one retrieved virtual resource, wherein said virtual resource comprises a resource utilized at a logic authoring time, while said actual resource comprises a resource utilized at a runtime.

The Examiner disagrees. The cited art teaches extracting at least one descriptor from said at least one retrieved virtual resource (i.e. descriptor contains the descriptions of features and functionality allowed and required in an implementation. It is a specific type of metadata)(paragraph [0049]), wherein said virtual resource comprises a resource utilized at a logic authoring time (i.e. virtual implementation using logic-based program.)(paragraphs [0079, 0250]), while said actual resource comprises a resource utilized at a runtime (i.e. run-time. The Examiner also finds support for runtime in the Provisional Application, see at least pages 20-21.)(paragraphs [0411-0412]).

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-37 are rejected under 35 U.S.C. 102(e) as being anticipated by Severin (U.S. 2005/0005261).

As per claims 1, 14, 27, 31, and 32, Severin teaches a method of claim 1 (Abstract), a system of claim 14 (Abstract), a system of claim 27 (abstract), a method of claim 31 (Abstract), and a computer-readable medium of claim 32 (Figure 5) of developing actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

constructing at least one virtual resource independent of an actual resource (i.e. constructs a virtual model implementation. The Examiner notes that the virtual model includes a virtual resource, which is independent from an actual resource, where a virtual host includes a virtual resource.)(paragraph [0248; 0550]);

storing the virtual resource independent of an actual resource (i.e. virtual resources are stored in a database)(paragraphs [0248, 0437]);

connecting the actual resource to the at least one virtual resource (i.e. Component Integration Engine (CIE) are a logical grouping of resources (i.e. virtual resource) that is configured to shared resource (i.e. actual resource) at run-time)(paragraphs [0410-0413]);

retrieving the at least one virtual resource (i.e. retrieving data record stored in a virtual instance)(paragraph [0257]);

extracting at least one descriptor (i.e. descriptor contains the descriptions of features and functionality allowed and required in an implementation. It is a specific type of metadata)(paragraph [0049]) from said at least one retrieved virtual resource (i.e. Extract Transform Load tool provides the ability to extract data from a data source)(paragraph [0438]);

wherein said virtual resource comprises a resource utilized at a logic authoring time (i.e. virtual implementation using logic-based program.)(paragraphs [0079, 0250]) while said actual resource comprises a resource utilized at a runtime (i.e. run-time)(paragraphs [0411-0412]).

As per claim 2 teaches a method of claim 2 (Abstract) wherein said connecting comprises directly mapping the at least one actual resource to the at least one virtual resource (i.e. mapping the meta-implementation between a virtual resource and an actual resource)(paragraph [0079]), and

wherein the constructing the at least one virtual resource comprises including constraints upon the virtual resources without altering the actual resources (i.e. "...The model controller can be substituted without requiring any changes to the model, allowing complete reuse of a single property or a set of properties...")(page 23).

As per claims 3 and 16, Severin teaches a method of claim 3 (Abstract), a system of claim 16 (Abstract) wherein the constructing comprises at least one of: renaming a method (i.e. methods)(paragraph [0084]); hiding a method (paragraph [0084]); composing a method (paragraph [0084]); renaming an attribute (i.e. attribute)(paragraph [0084]); hiding an attribute (paragraph [0084]); composing an attribute (paragraph [0084]); assigning to at least one domain (i.e. domains)(paragraph [0409]); designating as a collection; assigning to at least one validator (i.e. data validation)(paragraph [0089]); assigning a description (paragraph [0009]); designating as at least one of ready and not ready; and assigning a last modified date and time (paragraph [00410]).

As per claims 4, 8, 17 and 21, Severin teaches a method of claim 4 and 8 (Abstract), a system of claim 17 and 21 (Abstract), wherein said at least one virtual resource comprises a plurality of virtual resources and said virtual resources are connected to each other through a relationship carrying semantic that can be leveraged by a consumer of resources, said method further comprising:

constructing at least one virtual relationship between at least two virtual resources (i.e. constructs a virtual model implementation. The Examiner notes that the virtual model includes a virtual resource, which is independent from an actual resource, where a virtual host includes a virtual resource.)(paragraph [0248; 0550]);

coupling at least one actual relationship implementor to at least one virtual relationship;

performing at least one retrieval of a virtual relationship (i.e. retrieving data record stored in a virtual instance)(paragraph [0257]); and

extracting at least one descriptor (i.e. descriptor contains the descriptions of features and functionality allowed and required in an implementation. It is a specific type of metadata)(paragraph [0049]) from at least one retrieved virtual relationship (i.e. Extract Transform Load tool provides the ability to extract data from a data source)(paragraph [0438]).

As per claims 5, 18, and 22, Severin teaches a method of claim 5 (Abstract), a system of claim 18 and 22 (Abstract) wherein said coupling comprises: directly mapping said at least one actual relationship implementor to said at least one virtual relationship (paragraphs [0258, 0279, 0410]).

As per claims 6, 10 19, and 23, Severin teaches a method of claim 6 and 10 (Abstract), a system of claim 19 and 23 (Abstract) wherein the relationship constructing comprises at least one of: assigning a root virtual resource name; assigning a target virtual resource name; assigning a relationship name; assigning a relationship type; assigning a description; assigning a target instance naming scheme; designating as at least one of ready and not ready; and assigning a last modified date and time (The Examiner notes that the claimed limitations are an intended use of constructing and therefore are encompassed in the teachings of constructors.).

As per claims 7, 12, 20 and 25, Severin teaches a method of claim 7 and 12 (Abstract), a system of claim 20 and 25 (Abstract) wherein the retrieving comprises locating virtual relationships by at least one of: a domain; a name; a root; a type; and a target



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(The Examiner notes that the claimed limitations are an intended use leveraging virtual relationship and are encompassed in the teachings of virtual implementation.).

As per claim 9, Severin teaches the method wherein information constructing the at least one virtual resource includes data independent from the actual resource; the method further comprising: selectively manipulating the retrieved virtual resource by updating or deleting at least a portion of the retrieved virtual resource; and authoring the virtual resource into a logic code stored and executable by the computer to generate a second actual resource from the virtual resource (The Examiner notes that the claimed limitations are an intended use of constructing and therefore are encompassed in the teachings of constructors.).

As per claims 11 and 24, Severin teaches a method of claim 11 (Abstract), a system of claim 24 (Abstract) wherein the retrieving comprises locating virtual resources by at least one (i.e. mapping the meta-implementation between a virtual resource and an actual resource)(paragraph [0079]).

As per claims 13 and 26, Severin teaches a method of claim 13 (Abstract), a system of claim 26 (Abstract), wherein descriptor validator information is employed to limit actual resource usage (The Examiner notes that the claimed limitations are features that have been addressed in the independent claims and therefore addressed.).

As per claim 15, Severin teaches, a system of claim 15 (Abstract) wherein said connecting comprises directly mapping the at least one actual resource to the at least one virtual resource (i.e. mapping the meta-implementation between a virtual resource and an actual resource)(paragraph [0079]).

As per claim 28, Severin teaches a system further comprising: analyzing a requirement for actual resource usage, to provide said user requirements analysis (The Examiner notes that the claimed limitations are features that have been addressed in the independent claims and therefore addressed.).

As per claim 29, Severin teaches a system further comprising: defining at least one virtual relationship between at least two virtual resources(i.e. mapping the meta-implementation between a virtual resource and an actual resource)(paragraph [0079]).

As per claim 30, Severin teaches a system wherein at least one of a virtual resource and a virtual relationship is utilized to create an application program (paragraphs [0410-0413]).

As per claim 33, Severin teaches a method of developing actual resources without alteration into a collection of virtual resources customized to a particular audience, said method comprising:

constructing at least one virtual resource independent of an actual resource(i.e. constructs a virtual model implementation. The Examiner notes that the virtual model includes a virtual

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resource, which is independent from an actual resource, where a virtual host includes a virtual resource.)(paragraph [0248; 0550]); and

providing in the at least one virtual resource a structured meta-data layer which contains semantic information for leveraging by a consumer of the virtual resources (i.e. Component Integration Engine (CIE) are a logical grouping of resources (i.e. virtual resource) that is configured to shared resource (i.e. actual resource) at run-time)(paragraphs [0410-0413]), wherein said virtual resource comprises a resource utilized at a logic authoring time (i.e. virtual implementation using logic-based program.)(paragraphs [0079, 0250]) and said actual resource comprises a resource utilized at a runtime (i.e. run-time)(paragraphs [0411-0412]).

As per claim 34, Severin teaches a method wherein said semantic information includes relationships with agreed upon semantics including any of “related-to,” “contains,” and “is-conflicting-with,” between entities (The Examiner notes that the claimed limitations are an intended use of constructing and therefore are encompassed in the teachings of constructors.).

As per claim 35, Severin teaches a method wherein said semantic information allows any of making new resources manipulation operations available to logic authoring tools and services as an input to a conflict detection tool (The Examiner notes that the claimed limitations are an intended use of logic authoring tools.) , and

wherein the a common layer is provided to resource utilizing tools comprising the logic authoring tool to directly access the virtual resource (i.e. “...The model controller can be

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substituted without requiring any changes to the model, allowing complete reuse of a single property or a set of properties..."(page 23).

As per claim 36 and 37, Severin teaches a method further comprising:

creating at least one virtual resource instance (i.e. constructs a virtual model implementation. The Examiner notes that the virtual model includes a virtual resource, which is independent from an actual resource, where a virtual host includes a virtual resource.)(paragraph [0248; 0550]);

assigning an identity to the at least one virtual resource instance(i.e. Component Integration Engine (CIE) are a logical grouping of resources (i.e. virtual resource) that is configured to shared resource (i.e. actual resource) at run-time)(paragraphs [0410-0413]); and

associating the at least one virtual resource instance with one virtual resource(paragraphs [0410-0413]).

### ***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Farhan M. Syed whose telephone number is 571-272-7191. The examiner can normally be reached on 8:30AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Neveen Abel-Jalil can be reached on 571-272-4094. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/F. M. S./  
Examiner, Art Unit 2165  
27 October 2010

/Naveen Abel-Jalil/

Supervisory Patent Examiner, Art Unit 2165

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